OIFE
SEP 0 7 2005 4
THE WAS DEN BOUCK

Application No.	Applicant(s)	
10/019,639	SHIMADA ET AL.	
Examiner	Art Unit	•
Doug Hutton	2176	

e cover sheet with the call AINS) CLOSED in this appropriate communication his application is subject to P 1308. Inc. § 119(a)-(d) or (f). S.C. § 119(a)-(d) or (f). eived. eived in Application No nave been received in this application. ethe attached EXAMINER	olication. If not include will be mailed in due to withdrawal from issurnational stage applications of the complying with the re-	ed course. THIS are at the initiative
AINS) CLOSED in this appropriate communication his application is subject to P 1308. In 2005. S.C. § 119(a)-(d) or (f). Reived. Reived in Application No mave been received in this mmunication to file a reply his application.	olication. If not include will be mailed in due to withdrawal from issurnational stage applications of the complying with the re-	ed course. THIS le at the initiative
S.C. § 119(a)-(d) or (f). eived. eived in Application No nave been received in this mmunication to file a reply nis application.	national stage applica	x
eived. eived in Application No nave been received in this mmunication to file a reply nis application.	national stage applica	x
eived. eived in Application No nave been received in this mmunication to file a reply nis application.	national stage applica	x
eived. eived in Application No nave been received in this mmunication to file a reply nis application.	national stage applica	x
nis application.		quirements
nis application.		quirements
(s) why the oath or declarant nitted. ent Drawing Review (PTO ment / Comment or in the o	ation is deficient. -948) attached	NOTICE OF
ould be written on the drawi	ings in the front (not th	e back) of
DLOGICAL MATERIAL	must be submitted.	Note the
 6. ☐ Interview Summar Paper No./Mail Da 7. ☐ Examiner's Amenda 8. ☐ Examiner's Statem 	y (PTO-413), ate Iment/Comment	
(5. Notice of Informal 6. Interview Summar Paper No./Mail Days T. X. Examiner's Amend	tould be written on the drawings in the front (not the according to 37 CFR 1.121(d). OLOGICAL MATERIAL must be submitted. If DEPOSIT OF BIOLOGICAL MATERIAL. 5. Notice of Informal Patent Application (PT 6. Interview Summary (PTO-413), Paper No./Mail Date 7. Examiner's Amendment/Comment 8. Examiner's Statement of Reasons for Al 9. Other

Application/Control Number: 10/019,639

Art Unit: 2176



EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David A. Tucker on 25 August 2005.

The application has been amended as follows:

In the Specification:

Page 23, Line 4 → amend "then" to — than —.

In the Claims:

- > amend Claim 11 to:
 - 11. (Currently Amended) A border eliminating method, comprising:
 - a step of providing common area extraction means for extracting from
 images of a plurality of pages of a publication an area common to the
 images, the common area being portions similar in layout of the images;
 - a step of extracting from the images of a plurality of pages of a publication
 an area common to the images, the common area being portions similar in
 layout of the images, with the common area extraction means; and

- a step of providing border removal means for removing borders outside
 the common area of the images; and
- a step of removing borders outside the common area of the image from each image with the border removal means;
- wherein layouts with respect to at least either text or drawings in the common area of the images are similar to each other.

Drawings

The following changes to the drawings have been approved by the examiner and agreed upon by applicant:

in Figure 7C → amend "DETECITION" to — DETECTION —.

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

Election/Restrictions

Claims 1, 11 and 12 are generic and allowable. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn.

Allowable Subject Matter

Page 4

Claims 1-12 are allowed.

The following is an examiner's statement of reasons for allowance:

Claims 1 and 11:

The closest prior art is Denber, U.S. Patent No. 5,483,606. Denber discloses a computer device for selecting a "standard common area" for eliminating the borders of a plurality of images. The method comprises scanning a first document and determining the coordinates of the corners of a "content area" of the first document. The content area is that portion of the first document within which the content is contained. The content area is set as the "standard common area" for eliminating the borders of the subsequently scanned documents. Subsequent documents are scanned and processed by aligning the documents with the content area of the first document. That is, all subsequently scanned documents are shifted in order to aligned the content of the documents within the content area of the first document.

However, the prior art fails to disclose or suggest a device for eliminating borders by selecting a common area from a standard image by performing an edge detection process that determines the document image having the largest number of edges and comprising the combination of recited elements of Claim 1.

Because Claim 1 recites a "common area extraction <u>means for</u> extracting from images of a plurality of pages of a publication an area common to the images" (see

Application/Control Number: 10/019,639

Art Unit: 2176

Lines 2-4) and a "border removal means for removing borders outside the common area of the images" (see Lines 6-7), the prior art must disclose or suggest all structures and acts described in the specification that correspond to "extracting" from a plurality of images a "common area" and "removing borders outside the common area of the images" to invalidate Claim 1. These structures and acts include: 1) extracting a "common area," either through the "overlapping region" process (see Figures 3 and 8: see Specification - Page 35, first full paragraph through Page 37, first full paragraph) or the "edge detection" process (see Figures 4 and 9; see Specification - Page 37, last partial paragraph through Page 41, second paragraph); 2) removing borders that are outside the common area by determining the background color of the common area (see Figures 5 and 10; see Specification – Page 41, last partial paragraph through Page 47, first partial paragraph) and replacing the color of that portion of the image that is outside the common area with the determined background color of the common area (see Specification – Page 18, first partial paragraph and Page 29, first full paragraph); and 3) all computer hardware and software necessary to perform these acts disclosed in the Specification and Drawings.

Accordingly, the subject matter recited in Claim 1 is allowable.

Claims 2-10 and 12:

These claims are dependent upon Claim 1 and are thus allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

Art Unit: 2176

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Doug Hutton whose telephone number is (571) 272-4137. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached at (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

WDH August 25, 2005

DOUG HUTTON
PATENT EXAMINER
TECH CENTER 2100